CLAIM LISTING

1. (Previously presented) A stable immunogenic product for inducing antibodies raised against a TNFα protein in a subject, characterized in that it comprises protein immunogenic heterocomplexes consisting of associations between (i) TNFα protein molecules and (ii) KLH carrier protein molecules and in that more than 1% and less than 40% of the antigenic proteins (i) are covalently linked to carrier protein molecules (ii), and wherein the covalent bonds between one or more TNFα proteins and the KLH protein molecule are made through a bifunctional bond chemical agent consisting of glutaraldehyde.

2. (Previously presented) An immunogenic product according to claim 1, characterized in that each heterocomplex comprises (i) a plurality of TNFα proteins linked to (ii) a KLH carrier protein molecule.

3. (Previously presented)An immunogenic product according to claim 2, characterized in that, for each immunogenic heterocomplex, the plurality of TNFα proteins (i) is made up of a plurality of specimens of a single TNFα protein.

4.-10. (Cancelled)

11. (Withdrawn from consideration) An immunogenic product according to claim 1, characterized in that the antigenic protein(s) (i) is/are selected amongst the papillomavirus E7 protein, the HIV 1 virus Tat protein, the HTLV 1 or HTLV 2 virus Tax protein and the self p53 protein.

12. (Withdrawn from consideration) An immunogenic product according to claim 1, characterized in that the antigenic protein(s) is/are selected amongst proteins lethal to man at a doses lower than 1 mg.

13. (Withdrawn from consideration) An immunogenic product according to claim 12, characterized in that the antigenic protein(s) (i) is selected amongst ricin, botulic toxins, staphylococcus enterotoxins as well as an anthrax toxic protein.

14. (Withdrawn from consideration) An immunogenic product according to claim 1, characterized in that the carrier protein molecule (ii) is an immunogenic protein inducing the production of cytotoxic lymphocytes raised against cells having at their surface said carrier protein molecule or any peptide being derived from it, in association with Class I molecules of the Major Histocompatibility Complex (MHC).

15. (Withdrawn from consideration) An immunogenic product according to claim 14, characterized in that the carrier protein molecule (ii) is selected amongst papillomavirus L1, L2 and E7 proteins.

16. (Withdrawn from consideration) An immunogenic product according to claim 14, characterized in that the carrier protein molecule (ii) is selected amongst gp160, p24, p17, Nef and Tat proteins of the HIV1 virus.

17. (Withdrawn from consideration) An immunogenic product according to claim 14, characterized in that the carrier protein molecule (ii) is selected amongst CEA, p53, Di12, CaSm, OSA and ETS2 proteins.

18. (Withdrawn from consideration) An immunogenic product according to claim 14, characterized in that the carrier protein molecule (ii) is selected amongst allergenic proteins such Bet v 1, Der p 1 and Fel d 1.

19. (Withdrawn from consideration) An immunogenic product according to claim 18 characterized in that the allergenic proteins are selected amongst Bet v 1, Der p 1 and Fel d l.

20. (Withdrawn from consideration) An immunogenic product according claim 1, characterized in that it is selected amongst products comprising the following heterocomplexes, wherein the antigenic proteins (i), on the one hand, and the protein carrier molecule (ii), on the other hand, are respectively:

(i) IL-4 and (ii) KLH;

(i) alpha interferon and (ii) KLH;

(i) VEGF and (ii) KLH;

(i) IL-10 and (ii) KLH;

(i) alpha interferon and (ii) gp 160 of VIH1;

(i) IL-4 and (ii) the Bet v 1 allergenic antigen; and

(i) VEGF and (ii) the papillomavirus E7 protein;

h) (i) the inactivated VIH1 Tat protein and (ii) the VIH1 gp 120 protein;

(i) an IgE isotype human antibody and (ii) the inactivated VIH1 Tat protein;

j) (i) the ricin β fragment and (ii) KLH.

21. (Previously presented) A composition comprising an immunogenic product according to claim 1

22. (Previously presented) A pharmaceutical composition comprising an immunogenic product according to claim 1 in association with one or more physiologically compatible excipients.

23. (Previously presented) An immunogenic composition comprising an immunogenic product according to claim 1 in association with one or more physiologically compatible excipients.

24. (Previously presented) A vaccine composition comprising an immunogenic product according to claim 1 in association with one or more physiologically compatible excipients.

25. (Currently Amended) An immunogenic composition according to claim 23, characterized in that it comprises a ~~the~~ CpG immunity adjuvant.

26. (Withdrawn from consideration) A method for preparing an immunogenic product according to claim 1, characterized in that it comprises the following steps of:

a) incubating the antigenic proteins (i) and the carrier molecule (ii) in a molar ratio (i):(ii) ranging from 10:1 to 50:1 in the presence of a chemical binding agent;

b) collecting the immunogenic product comprising immunogenic heterocomplexes being prepared in step a).

27. (Withdrawn from consideration) A method according to claim 26, characterized in that the chemical binding agent is glutaraldehyde.

28. (Withdrawn from consideration)A method according to claim 26, characterized in that step a) is followed by a stabilizing step of the immunogenic heterocomplexes by the formaldehyde, prior to the step b) of collecting the immunogenic product.

29. (Cancelled).